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ABSTRACT

This paper presents the position of the Association for Childhood Education International (ACEI) regarding children's right to creative thought and expression. The position statement begins with a comparison of creativity in children and in adults, asserting that children have the right to creative development and that opportunities for creative expression should not be reserved only for children who earn them through obedience or because they display early talent. The paper calls for a redefinition of creativity, noting that there are considerable misconceptions about creativity among educators and the general public. Strategies to clarify the definition of creativity include equating creativity with productive thought, differentiating the eminent creativity of geniuses and the problem-solving ability more widely distributed, and gaining a multicultural perspective on the concept. The statement emphasizes that creativity depends on talent, motivation, interest, effort, and opportunity. The statement further maintains that creativity is socially supported, culturally influenced, and collaboratively achieved. In taking this position, the ACEI acknowledges that several challenges must be addressed by educators; the statement argues that educators should confront misconceptions about creative thinking, redefine creative teaching, provide role models of motivation and persistence in creative thought, call for appropriate assessment of creative processes and products, and reflect on their aspirations for children through a thoughtful critique of creative products in society. The position statement concludes by asserting that a belief in children's right to creative thought and expression transforms the classroom and becomes part of the social consciousness and social capital. (Contains 96 references.) (KB)

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Association for Childhood Education International (ACEI)

2003

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The Child's Right to Creative Thought and Expression

A Position Paper of the Association for Childhood Education International

Position written by Mary Renck Jalongo

ACEI'S POSITION ON CREATIVE THOUGHT

It is the position of the Association for Childhood Education International (ACEI) that the definition of creativity needs to be enriched and enlarged to be consistent with contemporary theory and research. Furthermore, it is ACEI's position that creative expression depends not on talent alone, but also on motivation, interest, effort, and opportunity. The creative process, contrary to popular opinion, is socially supported, culturally influenced, and collaboratively achieved. In taking this position, ACEI acknowledges that several challenges must be addressed by educators throughout the world. First, we need to redefine creative teaching and confront misconceptions about creative thinking. Second, we need to provide students with role models of motivation and persistence in creative thought, and arrive at more capacious ways of assessing creative processes and products. Finally, educational institutions and the larger societies in which they exist need to reflect deeply on what they hope children will become. We need to do more than prepare them to become cogs in the machinery of commerce. The international community needs resourceful, imaginative, inventive, and ethical problem solvers who will make a significant contribution, not only to the Information Age in which we currently live, but beyond to ages that we can barely envision.

Adults often make reference to children's active imaginations; point out that children, particularly young children, are creative; or note that children seem to be naturally curious and playful. Is it accurate to say that children have active imaginations? To be imaginative means that a person formulates rich and varied mental images, sees beyond the obvious, and draws upon experience in inventive and effective ways.

Studies of the brain activity of preadolescent children offer empirical evidence that children do indeed have active imaginations (Diamond & Hopson, 1999). Even wide awake children experience theta wave activity, which mature adults primarily experience when their minds hover between being awake and falling asleep. Theta wave brain activity is more relaxed, freewheeling, and receptive to fleeting mental images. Eminent creative individuals in various fields report trying a host of techniques to capture theta wave activity, including meditation, keeping a lighted ink pen at bedside, and so forth (Runco & Pritzker, 1999). Thomas Edison used to go to sleep with ball bearings clutched in his hands and metal pie plates positioned below so that, as his hands relaxed, he would be freshly awakened by the clatter and could jot down the ideas that came to him in that half-awake/half-asleep state (Goleman & Kaufman, 1992). It would seem that with more access to this theta wave activity, children are adept at forming varied and unusual images. Although children may not be more imaginative, they certainly do have active imaginations.

How does creativity in children compare with that of adults? Adults may have the advantage when it comes to storing and retrieving information, drawing upon experience, and making judgments about what is appropriate and effective. Fishkin (1998) uses the term "germinal creativity" as a preferred descriptor for budding creativity in children. While germinal creativity produces unique ideas, the child may not yet have the ability to execute them well or communicate them clearly to others.

Children's creative thought is bolstered by the fact that "the young child is not bothered by inconsistencies, departures from convention, nonliteralness . . . which often results in unusual and appealing juxtapositions and associations" (Gardner, 1993, p. 228). The creative assets of childhood include a tolerance for ambiguity, a propensity for nonlinear thinking, and receptivity to ideas that might be quickly discarded by an adult as too fanciful to merit further consideration. Because children do not have a firm line of demarcation between fantasy and reality, ideas from one realm can slip through into the other. Thus, children may respond in ways that are nonstereotypic, a trait that many adults, particularly those in the arts, find enviable (Kincade, 2002). Interestingly, contemporary philosopher Chung-Ying Cheng (2001) contends that an essential task in adulthood is to accept the reality of unreality and the unreality of reality. This, he argues, is the path to enlightenment and wisdom. The capacity for blurring the lines between reality and fantasy originates in childhood. When Pablo Picasso was asked why his work improved as he grew older, he observed that it had taken him a lifetime to learn to draw as a child, and that "Every child is an artist. The problem is how to remain an artist once he grows up" (http://tqpage.com/).

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Adults often seek to reconnect with childhood, a time before harsh critics, both external and internal, succeeded in reining in creative thought and discouraging the risk-taking that is necessary to generate fresh, original work. Children may not be, strictly speaking, "more" creative than adults; nevertheless, they certainly are differently creative from adults.

Are children naturally playful and curious? Here, the research is just beginning to catch up with anecdotal impressions of children's behavior. Imagine a group of preschoolers who are engaged in sociodramatic play, or school-age children who are making preparations to present a talent show in their neighborhood. In these childhood pursuits, we see intensity combined with playfulness, the very sort of "regulated curiosity" that empirical research associates with creative behavior (Kashdan & Fincham, 2002). Research on creative thinking often describes an ability to focus with such intensity that a person becomes "lost" in the work and time flies by unnoticed (Kashdan & Fincham, 2002). Eminent creative thinkers describe these times when their work is going well as times when their thinking proceeds more fluidly or "flows" (Csikszentmihalyi, 1990). Once the mind has been captivated by such an "optimal experience" it tends to pursue it again--even in the absence of external rewards (Csikszentmihalyi, 1996).

The child at play is the prototype for fluid-adaptive thinking that is simultaneously serious and playful (Rea, 2001). Fluid-adaptive thinking helps to explain why the work of the most brilliant scientists reflects the aesthetic attributes of art (e.g., an "elegant" theory) and why the work of the most brilliant artists possesses the control, order, and rigor of the sciences (e.g., a dance that "works"). Children are full of wonderment, capable of pursuing their interests with intensity and playfulness. If given the opportunity, they are naturally curious and playful (Isenberg & Quisenberry, 2002), and play during early childhood is predictive of later facility with divergent thinking (Russ, Robins, & Christiano, 1999). Even more to the point for educators is the finding that children who are actively engaged in learner-centered environments score higher on measures of creativity (Hyson, Hirsh-Pasek, & Rescorla, 1990; Rushton & Larkin, 2001).

Despite growing evidence that childhood is the wellspring for later creative pursuits, adults frequently fail to develop those rich resources of imagination, creativity, curiosity, and playfulness (Cobb, 1977; Martindale, 2001). Many experts have noted how children's creative thinking is stereotyped, romanticized, trivialized, and, at times, suppressed (Dacey & Lennon, 1998). If, as both classic and contemporary studies of talent development suggest, it takes nearly 17 years of training and preparation to contribute to a field, educators are in a unique position to influence creative development in human beings (Duffy, 1998). Consequently, it is unacceptable for creative thought and expression, a resource so valuable to society and vital to the individual, to be misunderstood, squandered, or squelched.

EVERY CHILD HAS THE RIGHT TO CREATIVE DEVELOPMENT

Educating children in ways that foster creative development is consistent with Fontana's (1997) notion of "education for being," which means offering children

> the right to express their own feelings, to give their view of events, to explain themselves, to reflect upon their own behavior, to have their fears and their hopes taken seriously, to ask questions, to seek explanations in the natural world, to love and be loved, to have their inner world of dreams and fantasies and imaginings taken seriously, and to make their own engagement with life. (cited in Craft, 2000, p. 13)

Opportunities for creative expression should not be reserved for children who "earn" them through obedience or because they display early glimmerings of star potential. This is a destructive practice. Take, for example, the development of musical talent. Schools routinely use tests to identify children with musical aptitude, who then will have access to the school's limited musical instruction resources, while children who do not test well are excluded from opportunities to acquire musical performance skills. Furthermore, as children mature, talent becomes less critical than the family's financial resources, including their ability to afford an instrument, private lessons, appropriate attire, and travel to musical performances and events. Both at home and at school, then, resources are the driving consideration.

Like the medical profession, educational systems have an obligation, first and foremost, to do no harm. Not only is it harmful to label children as devoid of musical potential, it is also very likely to be inaccurate. Quick-scoring tests do not address such important variables as motivation or interest. Usually, musical aptitude tests emphasize the ability to hear various notes, match them, or discriminate among them. At the very least, the school should uphold every child's right to enjoy and participate in music, and should make their musical resources accessible to all students.

Creative thought is domain specific and affected by the particulars of the situation (Han & Marvin, 2002). A person who is highly creative in one domain and environment--such as preparing a meal in a well-equipped kitchen--may appear to be lacking in creativity in another situation--such as leading a meeting of investment bankers in a corporate boardroom. Therefore, children need to experience a wide range of interesting activities in order to discover their particular creative assets. Creative thinking is not the exclusive province of special programs for the gifted and talented. It is not a curricular

"frill" to be deleted when time is limited. Nor is it the same thing as enrichment, something reserved for those children who have already completed their required work. Rather, creativity is a capacity of every child that ought to be valued and extended across the lifespan.

All children have the right to have their interests and abilities affirmed and nurtured; all children deserve opportunities for creative thought and expression (Isenberg & Jalongo, 2001). Predictions about which children will become highly creative and productive as adults are notoriously inaccurate, because such gifts and contributions develop over time and are influenced by purpose, play, and chance (Gruber & Davis, 1988). Therefore, it is incumbent upon all who work with children not only to see the genius in every child but also to advocate for every child's creative development (Armstrong, 1998).

CREATIVITY: ACEI'S CALL FOR REDEFINITION

For decades, creativity has been hindered by a stale debate filled with contradictions. It is common to say that "everyone is creative," yet focus exclusively on inventors whose products revolutionized society; it is typical to argue that creative thinking is an asset to be cultivated, yet dwell on stories of geniuses at the brink of madness; and it is customary for business, industry, and governments to publicly extol the virtues of innovation, all the while succumbing to habit, preferring routine, and seeking the comfort of conformity (Horibe, 2001). Furthermore, even when people are convinced of the valuable contributions of creative thought in adult society, creative thought in children too often is treated as aimless, frivolous, and counteractive to the attainment of academic standards.

Misconceptions about creativity are prevalent among educators as well as the general public (Jalongo, 1999). In a study of over a thousand teachers' attitudes toward creativity (Fryer & Collings, 1991), only about half of the teachers regarded divergent thinking as an element of creative thought. In sharp contrast, experts on creativity regard breaking stereotypes as a critical feature of creative thought, and consider the need to engage in "what if" and "as if" types of thinking as the very essence of imagination (Egan, 2003; Weininger, 1988). It is ACEI's position that creativity needs to be reconceptualized along at least five dimensions.

A first step in clearing up the confusion about creativity is to *use the word "creative" in combination with "thought"*(Webster, 1990). This helps to dispel the common misconceptions that creativity is elusive and defies description, that creative individuals are ineffectual free spirits, or that creative teaching and learning is antithetical to rigor and quality. In fact, creativity is a key component in Sternberg's (1998) theory of successful intelligence, which he defines as "a set of mental abilities used to achieve one's goals in life, given a sociocultural context, through adaptation to, selection of, and shaping of environments" (p. 65). Sternberg's triarchic theory of intelligence combines analytical thinking (e.g., analyzing, comparing/contrasting, evaluating, explaining) with creative thinking (e.g., creating, designing, imagining, supposing) and practical thinking (e.g., using, applying, implementing). Both Sternberg (1998) and Gardner (2000) provide a much more expansive definition for intelligence, one capable of moving far beyond the popular, yet inaccurate, notion that the word "creative" is another word for "unusual." Rather, creative thought is synonymous with productive thought, because it relies complex reasoning processes (Marzano, Pickering, & McTighe, 1993) such as "comparing, classifying, inducting, deducting, analyzing errors, constructing support, abstracting, analyzing perspectives, making decisions, investigating, inquiring, problem solving, and inventing" (Beattie, 1997, p. 5).

A second key approach to sorting out the definition of creative thought is to *recognize that creative potential alone is insufficient to bring ideas to fruition*. Just as athletic abilities can lie dormant due to lack of opportunity, be undermined by overzealous or misguided attempts to accelerate them, or be destroyed by bad decisions, creative capacities can be underdeveloped, diminished, and ruined. Creativity is a complex developmental system that is shaped by at least seven influences: 1) cognitive processes; 2) social and emotional processes; 3) family aspects, both while growing up and current; 4) education and preparation, both informal and formal; 5) characteristics of the domain and field; 6) sociocultural contextual aspects; and 7) historical forces, events, and trends (Feldman, 1999, pp. 171-172).

A third useful direction in redefining creativity is to *differentiate between "big C Creativity," or the eminent creativity of celebrated geniuses, and "little c creativity," or the problem-solving ability that is more widely distributed among people* (Craft, 2000; Nakamura & Csikszentmihalyi, 2001; Ripple, 1989; Runco, 1996). To think only in terms of mature creative genius underestimates the contributions of creativity during childhood, and puts a price tag on creativity that makes it valuable only when it saves time, labor, or money. Society needs to value the "little c creativity" that teachers use to plan a successful lesson or that parents use to stretch their budgets. The contributions of everyday problem solving may not be spectacular, yet they are significant.

A fourth strategy in redefinition is to *gain a multicultural and global perspective on the concept of creativity*. Western ideas about creativity tend to emphasize invention, individual achievement, and linear problem-solving processes (Lubart, 1990, 1999). Interestingly, other cultures pursue creativity as a contribution to the good of the group. For example, everyone in Bali is expected to sing, dance, share stories, craft objects, and so forth--not just those chosen few judged to be talented. To

the Balinese, being singled out as particularly talented in the arts would be a source of embarrassment rather than pride. This notion is quite a departure from the Western way of thinking. Becoming enlightened about creative thought, therefore, involves broadening our viewpoint beyond the immediate context and adopting a perspective that can embrace creative endeavors at different times, in other places, and within various cultures. In order to achieve this, we need to abandon what Jerome Bruner (1996) refers to as the "computational" view of thought in which the mind merely processes (e.g., inscribes, stores, sorts, retrieves, manages) information, and replace it with a cultural view in which the mind itself is a cultural artifact. From the computational view, the development of mind is an inside-out operation; from the cultural view, the development of mind is an outside-in operation (Roeper & Davis, 2000), as individuals share the symbol systems, modes of discourse, and ways of being in the world with their respective communities. As Meador (1999) points out, creative thinking is part of a common language that has the capacity to transcend "race, country, culture, and economic level" (p. 324). Speaking that common language is one important way to reconceptualize what it means to be creative.

A fifth important step in redefining creative thinking is to *acknowledge that capturing the essence of creative endeavors demands a blurring of traditional disciplinary boundaries and varied methods of representation.* Creative thought is in no way limited to the fine arts. When the personnel of the Nobel Museum decided to create the museum's first international exhibit to commemorate the 100th anniversary of the Nobel Prize, they were confronted with the challenge of capturing and communicating creative eminence. Clearly, the exhibit would need to embrace an array of disciplines and employ multiple means of representation, including innovative use of film, archival objects, interactive exhibits, photography, computer databases, and the Internet (Gelescke, 2001). Representing creativity in schools also requires interdisciplinary approaches. "Picturing a Century," a project to chronicle the history of Finnish art education, resulted in a CD-ROM that synthesized teaching materials, photographs, text and sound recordings, interviews with art educators, and archives of student work submitted between 1939 and 1981 to the National Board of Education in Finland (Pohjakallio, 1998). Efforts such as this one to represent the creative process require moving beyond subject matter boundaries and communicating what we know and can do in a variety of ways.

Motivation, Interest, and Effort Are As Important As Talent

In 1925, giftedness was operationally defined as ranking in the top one percent in terms of intelligence. Today, theories on giftedness focus on other traits as well, such as interest, motivation, planning, attention, persistence, creativity, leadership, self-confidence, and self-esteem (Amabile, 2001; Naglieri, 2001; Robinson & Clinkenbeard, 1998; Ryan & Deci, 2000). As Li (1996) explains,

> Everybody has gifts; giftedness is a potential. . . . Education can enhance creativity and giftedness because creative thinking . . . can be taught and learned. It is necessary to make a distinction between child giftedness and adult giftedness. A gifted adult is not a simple continuation of a gifted child. Many gifted children do not produce creative works when they become adults and many gifted adults do not have their gifts recognized as children. A lot of complicated extra-intellectual factors affect adult giftedness and accomplishment. (p. 209)

Stunning creative thought does not simply appear. Rather, it is the product of years of learning, thought, and preparation (Weisberg, 1992). In fact, many contemporary psychologists downplay the role of innate talent, and instead emphasize deliberate practice (Ericcson & Charness, 1994). Such a perspective would call into question the "talent scout" mentality that often operates in schools. If it is talent we seek, then we must actively develop it rather than merely take notice after it has emerged. History is replete with examples of creative individuals who were not highly regarded by their teachers when they were students, yet nevertheless made monumental contributions to society as adults. The appropriate role of education is to provide all children with a host of thoughtfully designed experiences in creative representation, beginning in early childhood (Brickman, 1999; Chenfeld, 2002) and continuing throughout school (Torff, 2000). Creative abilities contribute to the quality of life both inside and outside of school; therefore, any discussion of lifelong learning must include attention to creative thought and expression.

The Creative Process Is Collaborative

When asked to describe a creative individual, people from Western cultures often offer stereotypic portrayals, such as the lone genius who remains a fiercely independent outsider and is misunderstood, unappreciated, or even feared by the power group--the "writer in the garret" archetype. Contrary to popular opinion, however, bringing creative thought to fruition requires more than personal ability or even individual determination; it requires social support (Csikszentmihalyi, 1988; Gruber & Wallace, 1999; Zimmerman & Zimmerman, 2000). Whether the work is a technological breakthrough, a paradigm-shifting scientific theory, an aspiring singer's first CD, or an elementary school child's drawing and story, successful innovation requires some access to social capital. Social capital refers to a range of resources that are intellectual, economic, cultural, and institutional in nature (McLaughlin, 2001), and that are differentially distributed and allocated depending on an individual's circumstances in society, access to these resources, and ability to elicit appropriate support. In fact, an "investment" theory of creativity depicts the creative process as "buy low" and "sell high," taken to mean that the creative individual invests in an idea with rather humble origins, persuades others of its importance, then leaves that idea and goes on

to another one that requires development (Sternberg & Lubart, 1996). It is no accident that many highly creative individuals throughout history have been particularly adept at convincing others to marshal the social capital necessary to transform an idea into a reality.

A creative product, no matter how cutting edge, is ultimately a unique recombination of elements that already exist. It bears the markings of what was invented previously; it is not entirely new. For this reason, if for no other, we need to replace the metaphor that characterizes creativity as a bolt out of the blue and replace it with something completely different, such as the metaphor of a circuit board. The circuit board metaphor would characterize creative processes and tasks as a network of interconnected elements bound together by a shared background, which would represent, to extend the analogy, the cultural backdrop against which creative ideas, tasks, and products are played out.

We need only to look around to see that our actions reflect a belief in social networks capable of stimulating creative thought, as well as a conviction that some environments are more conducive to innovation than others. For example, students leave home to attend college, corporations invest millions in think tanks, and scientists work together in laboratory settings, all based on the assumption that particular environments and forms of interaction yield more creative outcomes. Rather than urging children to be creative in quiet solitude, we need to look at how creativity is nourished outside of schools. Educators need to abandon the misconception that creativity flourishes only in isolation and only at the margins of society. Consider, for instance, the intellectual networks that have fostered stunning achievements--the Impressionist School of Artists, Frank Lloyd Wright's community of architects, or the thousands of creative thinkers who have contributed to the Internet. Likewise, education at its best uses creative, collaborative processes to generate work that builds relationships. In one such example, an art and history program in Florida promoted more positive ethnic relations between African American and Latino preadolescents (Cruz & Walker, 2001). Indeed, from a sociological perspective, intellectual innovations are not properties of individuals or ideas, but rather of dynamic networks and organizations (Collins, 1998).

CHALLENGES FOR EDUCATORS

Educators bear a major responsibility as advocates for children's creative thought and expression. Fulfilling this important role often involves unlearning common assumptions and replacing them with more enlightened perspectives. Educators and educational organizations that promote creative thought operate on the assumption that "everyone has creative potential but developing it requires a balance between skill and control and the freedom to experiment and take risks" (Robinson, 2001, p. 45).

Confront Misconceptions About Creative Thinking

What implicit theories do you hold about creative thinking? As teachers, even nuances of belief can affect expectations for children and the details of daily practice. Thus, teacher behavior can be either "facilitative or inhibitive" of children's creative thought and expression (Runco & Johnson, 1993, p. 91). Many parents and teachers, for example, confuse precocity (early emergence of abilities) with creativity (development of original and useful processes and products) (Fishkin & Johnson, 1998; Nicholson & Moran, 1986). Others mistakenly regard creativity as a synonym for eccentric, inappropriate, or even self-destructive behavior. Nettle (2001) points out, however, that disorganized and damaging behavior is an anathema to creative productivity. Educators at all levels need to reconcile rigor and creativity, and to treat them as compatible, co-existing dimensions of intelligence. Educators also need to communicate these ideas to parents, families, and community members so that they can begin to challenge prevailing assumptions about creativity and talent (Kemple & Nissenberg, 2000; Rotigel, 2003). Several other erroneous assumptions about creativity are both prevalent and persistent (Kindler, 1997):

Erroneous Assumption 1: Creativity is naturally unfolding. Actually, creativity, like any other ability, needs encouragement and guidance. The notion that it naturally unfolds too often results in laissez-faire approaches that reduce the teacher's role to distribution of materials. Children need gentle coaching. Skilled guidance is the purpose of artist-in-residence programs around the globe. Young children in Reggio Emilia created a guidebook to their city (Davoli & Ferri, 2000); Scottish children, ages 10 to 14, constructed three-dimensional art projects intended for public display (Coutts & Dawes, 1998); and adolescents in Brooklyn used their skills in critical thinking and the graphic arts to make powerful statements about their identity and the violence, drugs, and gangs in their environment (Simpson, 1995). In these cases, creativity did not unfold predictably like a lima bean seed germinating under time-lapse photography; rather, the children were apprenticed into understanding the repertoire of skills necessary to attain excellence, and were given the opportunity to practice those skills alongside helpful, observant professionals and peers.

Erroneous Assumption 2: Creativity is all about process. In truth, the creative mind that fails to generate anything can hardly be expected to make a contribution. Although it is true that the process needs to be valued, it is not an end unto itself. In virtually every depiction of the creative cycle, the culmination involves evaluation of a product. Take, for example, written composition. Although the child's writing process needs to be valued and supported, the writer also needs opportunities to share writing with others. When children are urged to languish at the process stage, based on some adult's misguided ideas

about process, they are being denied the satisfaction of bringing work to a conclusion, which is surely one of creativity's great rewards.

Erroneous Assumption 3: The creative process is a safety valve. Although creative works are forms of self-expression, this does not mean they are purely ways of "letting off steam." One look at an Irish step dance class contradicts the idea that jumping around to release excess energy is the reason for dance. Rather, the dance movements are planned, controlled, and practiced. The tendency to treat the arts as emotional outlets distances creative work not only from the cognitive and physical processes used to attain excellence, but also from the cultural contexts in which creative works are produced (Duncum, 2001; Freedman, 2000). Take, for example, the art form of Vietnamese water puppetry. In this performance art of the rice fields, which dates back to 1121, water is used to move the puppets in ways that complement a story element (e.g., violently during a battle, gently undulating during a quiet scene) and to conceal the operational apparatus below the surface (Contreras, 1995). Reducing this work to a safety valve strips it of its power. Art is much more than an emotional outlet. In the case of Vietnam's water puppetry, it is an expression of traditional values, a source of national pride, and, for those outside the culture, a way of promoting intercultural understanding.

Confronting misconceptions about creativity cannot stop at the level of the individual child, teacher, and family. Such misconceptions about children's creative thought and expression need to be addressed at the school, district, national, and international levels.

Redefine Creative Teaching

What does it mean to be a "creative" teacher? Some people mistakenly believe that it means generating better than average lesson plans or visual aids. If an educator's effectiveness is determined by her or his ability to develop creative thought and expression in children, however, much more is necessary. In her 1996 study of 1,028 teachers in the United Kingdom, Fryer arrived at some essential characteristics of creative teaching. The top five included teachers' commitment to:

- Deepen learners' understanding of the world
- Believe in the creative ability of all students
- Adapt the curriculum to meet children's individual needs
- Encourage empathy in learners
- Value creative expression in learners, and teach in ways that facilitate it.

These findings suggest that creative teaching involves dispositions as well as pedagogical skills. Perhaps the most important disposition in educators who strive to become creative teachers is, as Fritz (2002) argues, the determination to "find the balance between stifling the students within a limited set of skills and letting them loose with endless horizons but ill equipped with skills and knowledge to realize their ideas" (www.21learn.org/arch/articles/fritz.html). The arts have always been focused on "mixtures and balances." Creative teaching can do no less, for it too relies on an appropriate blend of structure and freedom for students, teachers, and curriculum. In China, where 178 million children attend elementary and secondary school, the official purpose of art in "the national curriculum is to foster patriotism, morality, and socialism"; however, the teachers also recognize their responsibility to enlarge children's vision and allow them to create according to their imaginations (Perry, 1998). Such dichotomies are not unique to China, nor are they resolved by either/or thinking. It takes both commitment to children and political savvy to negotiate such conflicting views. It takes mixtures and balances.

Furthermore, the focus of creative teaching needs to be as much, if not more, on the learner than it is on the teacher. According to Stanko (2000), teachers can function more creatively in three basic ways: 1) by teaching the skills and attitudes of creative thinking to students; 2) by orienting students to the creative methods of various disciplines; and 3) by creating a "problem friendly" classroom in which lines of inquiry, with relevance for the learners, can be pursued through multi-disciplinary methods. A classroom that promotes creative thinking takes a "problem finding" approach, differentiating between superficial mental exercises (in which the teacher typically knows the answer in advance) and genuine inquiry. In order to function at full creative capacity, children need the freedom to pursue questions that captivate them, and to work in learning environments that offer a blend of high support and high expectations (Rea, 2001). Amabile (1986) describes certain "creativity killers," including inflexible schedules, intense competition, reliance on extrinsic rewards, and lack of free time. Although a certain amount of "breathing room" is necessary in order to develop creative potential, studies of school arts in the United States suggest that the power of art is diluted by teacher practices being guided by the following constraints: 1) time (e.g., choosing quick projects to conform to a 30-minute time block); 2) materials (e.g., using inexpensive materials, since high-quality art materials are not supplied); 3) physical environment (e.g., being concerned

neatness and clean up); and 4) presentation (e.g., lack of space and resources for appropriate display of children's art) (Bressler, 1998).

Provide Children With Role Models of Motivation and Persistence in Creative Thought

From a psychological perspective, high skill and low challenge leads to boredom (Csikszentmihalyi, 1996), a dynamic that helps to explain why so many highly creative adults were considered troublesome as schoolchildren. Conversely, low skill and high challenge leads to frustration, a dynamic that helps to explain the angry and destructive student. When the media covers stunning creative achievements, they often gloss over the struggles and disappointments along the way. It is important, however, for children to see that the road to innovation is not always apparent or easy, and that having a mind stocked with ideas and a growing repertoire of skill "rather than being blessed with pure luck" is the surest route to making a creative contribution.

It is helpful for children to see how people who have accomplished personal goals "peers, parents, family members, community members, and professionals from various fields" think about their work and refine it, whether it is a teacher sharing a piece of writing that she hopes to polish for publication, or an illustrator sharing dissatisfying first efforts as well as the ones that were chosen for publication and explaining the reasons for those choices. Children need adult role models who rebound from discouragement, whose work is their avocation, and who persist at a task until a high-quality result is achieved. The creative individual is challenged by ambiguity, is comfortable with multiple perspectives, and often addresses the "same" problem across a series of works or experiments, even if these efforts are not always successful (Lindstrom, 1997).

It is equally important for parents, families, and the larger community to encounter these role models. Participation in the arts "namely, those subjects with undeniable connections to creative processes, such as art and music" is clouded by stereotypes, gender bias, and prejudice. In a qualitative study of parental attitudes toward arts education for children, most parents considered the arts to be feminine, frivolous, and nonessential in terms of getting ahead in the "real world" except as a mechanism for acquiring self-discipline (e.g., through regular practice of a musical instrument). They were conflicted about ways in which the arts affected social status; in one study, even families who strongly supported arts education preferred that it be an extracurricular activity, in order to preserve the exclusivity of their child's training (Gainer, 1997).

Call for Appropriate Assessment of Creative Processes and Products

At one time, assessing creativity was fairly straightforward. The main characteristic under consideration was novelty, and that could be measured, even quantified, by statistical rarity. Today, experts in the field have added appropriateness, usefulness, and value as desirable qualities. Consequently, assessment of creative products is now far more difficult. There is the practical difficulty of deciding how to respond to students' aesthetic engagement and how to assess their work, as well as the broader issue of different beliefs in different subject areas about what qualifies as creativity, how to determine the cultural value of work, and the language used to communicate these important and powerful ideas.

Appropriate assessment of creative tasks and processes is a challenge for at least four reasons. First, creative works are multi-faceted, multi-layered, and do not yield a single, correct, and easy-to-score response. Second, creative processes that are highly productive in one discipline may be ill-suited to another domain. Third, creative processes and tasks are context-specific and are greatly affected by the particulars of the situation in which the work was brought to fruition. Fourth, although numerous psychometric tools exist--Fishkin and Johnson (1998) reviewed over 60 different instruments for assessing creativity in school-age childre-- no single measure can predict a child's creative potential or assess a person's creative capacity.

It is a truism that, in schools, work that is not linked to standards and assessed in some systematic way is treated as less important and less vital to educational purposes. When work is not assessed, it is treated as if it does not "count." Such work also can be expected to be on the endangered list when resources are in short supply--witness the almost constant threat to school art and music programs in the United States. Fortunately, several national organizations have generated standards and guidelines that can provide a framework for assessment in the arts, including the National Advisory Committee on Creative and Cultural Education (1999) in the United Kingdom and the Consortium of National Arts Education Associations and National Committee for Standards in the Arts (1994) in the United States. In their book on evaluating creativity, editors Sefton-Green and Sinker (2000) contend that evaluation is the crux of the matter. Increasingly, the emphasis rests on the contribution of the creative product or response as judged by an appropriate group of observers; in other words, a consensual

process is used to assess creativity (Amabile, 2001; Priest, 2001). Alternative assessment provides numerous examples of a consensual process used to evaluate creative products, such as a team of elementary school teachers evaluating children's writing portfolios, or a panel of secondary educators scoring a student's senior project. It is critical that creative processes and products be part of the overall assessment plan in the curriculum.

Appropriate assessment of creative efforts:

- Is founded on expanded definitions of intelligence and creativity
- Is fair (e.g., gives all students an equal opportunity to participate) and adapted to the special needs of individual students
- Is oriented toward students but planned and monitored by teachers who can clearly state the purpose of the assessment, identify the domain to be assessed, understand the assessment strategy or task, prepare the actual task or exercise, devise a scoring plan, and make a plan for reporting the results
- Is integrated with the curriculum (e.g., supports instruction and course objectives)
- Is committed to evaluating creative work at multiple levels and from multiple perspectives
- Is continuous and focuses on providing ongoing feedback
- Is focused on "real world" tasks and considers the particulars of the context in which creative works are generated
- Includes both informal and formal assessment strategies
- Considers not only the products but also the processes
- Provides opportunities for students to revisit the work, refine, and revise
- Is responsive to knowledge of disciplinary content, skills, and processes of a discipline, requisite motor skills in a discipline, appropriate procedures in particular contexts, self-appraisal of strengths and weaknesses in a discipline, and insight into the dispositions and values associated with achievement in a domain
- Is concerned with determining students' preconceptions and changing their misconceptions
- Is linked to standards and referenced to criteria
- Is supportive of collaborative and cooperative learning. (adapted from Beattie, 1997)

Educators throughout the world are grappling with ways of designing curriculum and assessing it in ways that promote creativity, such as the Japanese Ministry of Education's attempt to define expressive education in early childhood (Mori, 1996). As part of this reconceptualization of assessment, teachers need to rethink the practice of using contests and tangible rewards. Growing support in the literature for the social-cognitive perspective argues that overreliance on conspicuous rewards may actually diminish the desired behavior (Fawson & Moore, 1999). This consequence is thought to occur in two major ways: partly by constraining the response (e.g., a student chooses a less innovative response to avoid rejection), and partly by diverting attention from the intrinsic rewards of the task (e.g., a student becomes focused on the prize instead of the process) (Joussement & Koestner, 1999). Thus, it *is* possible to assess creative processes and products, but only if educators are willing to challenge the customary ways of evaluating children's work.

Reflect on Our Hopes and Dreams for Children

In a recent interview (Cramond, 2001) with E. Paul Torrance, one of the pioneers in creativity research, Torrance talked about his 30-year study of what he referred to as the "beyonders," those individuals whose creative achievement was remarkable in a particular domain (Torrance, 1993). The characteristics that these individuals shared were: a delight in deep thinking, a tolerance for mistakes, a passion for their work, a clear sense of purpose and mission, an acceptance of being different and a level of comfort with being a minority of one, and a tendency to ignore admonitions about being "well-

rounded." Based on this research, Torrance and his colleagues (Henderson, Presbury, & Torrance, 1983) advised children to pursue their interests with intensity, work to their strengths, learn to self-evaluate, seek out mentors and teachers, and learn to be interdependent. Such advice, based on studies of those who excelled in their chosen fields and functioned at very high levels of creativity, is suggestive of the type of changes that need to be made in schools and programs to make them places in which creative thought can grow.

An environment for creativity would have to go against the grain of prevailing ideas about creativity and emphasize critical judgment. One important reason for this emphasis is that creative thought is not inherently "good." Creative processes and products can be put to destructive ends. Therefore, it makes sense to guide children in examining the underlying values of creative work. In fact, many of the activities that are used to teach media literacy take this approach (Semali & Watts Pailliotet, 1999). An advertiser might spend hundreds of thousands of dollars on a creative idea for promoting a product. But whose interests are being served? Who is most likely to be taken in by the appealing advertisement? What are the consequences for society at large if questionable claims and business practices are allowed to proliferate? Society is inundated with unstructured problems like this one, not by the neat, predictable, and orderly kinds of questions too often presented in school. If we seek to prepare children for the future, we must devote attention to the thoughtful critique of creative products in society. We also must think beyond what is customary, orthodox, and conventional if the genuinely important potential of creativity—the ways in which it is used to capture the very essence of its culture—is to be realized.

CONCLUSION

As Robinson (2001) argues,

Developing creative abilities calls for sophisticated forms of teaching and for relevant forms of assessment and accountability. . . . As long as the debate in education is seen simplistically as a contest between traditional and progressive methods, creativity or rigour, the fundamental objective of developing an education system for the twenty-first century will be thwarted. These are not simply questions of standards or accountability but of purpose and vision. (p. 49)

A belief in the child's right to creative thought and expression transforms the classroom. In the past, in the present, and in the future, our most enlightened visions of education will be connected by the common thread of imagination, creative thought, and enhanced opportunities for creative expression. As we look ahead, it will no doubt be possible to trace society's greatest innovations and achievements back to an abiding respect for creative thought processes during childhood. For when we value creative thinking and creative expression in society, it becomes part of our social consciousness and social capital. Society then protects its reserves of creativity by fashioning networks of support that are capable of instilling confidence, promoting resilience, and multiplying ways of being intelligent in every person, commencing in childhood and continuing throughout the lifespan.

References

Amabile, T. M. (1986). The personality of creativity. *Creative Living, 15*(3), 12-16.

Amabile, T. M. (2001). Beyond talent: John Irving and the passionate craft of creativity. *American Psychologist, 56*, 333-336.

Armstrong, T. (1998). *Awakening genius in the classroom*. Alexandria, VA: Association for Supervision and Curriculum Development.

Beattie, D. K. (1997). *Assessment in art education*. Worchester, MA: Davis Publications.

Bressler, L. (1998). "Child art," "fine art," and "art for children": The shaping of school practice and implications for change. *Arts Education and Policy Review, 100*(1), 3-10.

Brickman, N. A. (1999). *Creative representation: High/Scope preschool key experiences*. Ypsilanti, MI: High/Scope Educational Research Foundation.

Bruner, J. S. (1996). *The culture of education*. Boston: Harvard University Press.

Chenfeld, M. B. (2002). *Creative experiences for young children* (3rd ed.). Portsmouth, NH: Heinemann.

Cheng, C. (2001). "Unity of three truths" and three forms of creativity: Lotus sutra and the process of philosophy. *Journal of Chinese Philosophy, 28*(4), 449-456.

Cobb, E. (1977). *The ecology of imagination*. New York: Columbia University.

Collins, R. (1998). *The sociology of philosophies: A global theory of intellectual change*. Cambridge, MA: Harvard University Press.

Consortium of National Arts Education Associations and National Committee for Standards in the Arts. (1994). *National standards for arts education: What every young American should know and be able to do in the arts*. Reston, VA: Music Educators National Conference.

Contreras, G. (1995). Teaching about the Vietnamese culture: Water puppetry as the soul of the rice fields. *Social Studies, 86*(1), 25-28.

Coutts, G., & Dawes, M. (1998). Drawing on the artist inside: Towards 1999. *Journal of Art and Design Education, 17*(2), 191-196.

Craft, A. (2000). *Creativity across the primary curriculum: Framing and developing practice*. London: Routledge.

Cramond, B. (2001). Interview with E. Paul Torrance on creativity in the last and next millennia. *Journal of Secondary Gifted Education, 12*(3), 116-120.

Cruz, B. C., & Walker, P. C. (2001). Fostering positive ethnic relations between African American and Latino children: A collaborative urban program using art and history. *Multicultural Perspectives, 3*(1), 9-14.

Csikszentmihalyi, M. (1988). Society, culture, and the person: A systems view of creativity. In R. J. Sternberg (Ed.), *The nature of creativity* (pp. 325-329). New York: Cambridge University Press.

Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York: Harper and Row.

Csikszentmihalyi, M. (1996). *Creativity: Flow and the psychology of discovery and invention*. New York: Harper and Row.

Dacey, J. S., & Lennon, K. H. (1998). *Understanding creativity: The interplay of biological, psychological, and social factors*. San Francisco: Jossey-Bass.

Davoli, M., & Ferri, G. (Eds.). (2000). *Reggio Tutta: A guide to the city by the children*. Rome: Ministry of Education.

Diamond, M., & Hopson, J. (1999). *Magic trees of the mind: How to nurture your child's intelligence, creativity, and healthy emotions from birth through adolescence*. New York: Penguin.

Duffy, B. (1998). *Supporting creativity and imagination in the early years*. Buckingham, UK: Open University Press.

Duncum, P. (2001). Visual culture: Developments, definitions, and directions for art education. *Studies in Art Education, 42*, 101-112.

Egan, K. (2003). Start with what the student knows or with what the student can imagine? *Phi Delta Kappan, 84*(6), 443-445.

Ericsson, K. A., & Charness, N. (1994). Expert performance: Its structure and acquisition. *American Psychologist, 49*(8), 425-747.

Fawson, P. C., & Moore, S. A. (1999). Reading incentive programs: Beliefs and practices. *Reading Psychology, 20*, 325-

340.

Feldman, D. H. (1999). The development of creativity. In R. J. Sternberg (Ed.), *Handbook of creativity* (pp. 169-186). New York: Cambridge University Press.

Fishkin, A. S., Cramond, B., & Olszewski-Kubilius, P. (Eds.). (1998). *Investigating creativity in youth: Research and methods*. Cresskill, NJ: Hampton Press.

Fishkin, A. S., & Johnson, A. S. (1998). Who is creative? Identifying children's creative abilities. *Roeper Review, 21*(1), 40-46.

Fontana, D. (1997). Cited in Craft, A. (2000), *Creativity across the primary curriculum: Framing and developing practice*. London: Routledge. (p. 13.)

Freedman, K. (2000). Social perspectives on art education in the U.S.: Teaching visual culture in a democracy. *Studies in Art Education, 41*, 315-329.

Fritz, A. (2002). *Keynote address for IDATER '98--Creativity: From philosophy to practice*. Retrieved August 28, 2002, from www.21learn.org/arch/articles/fritz.html

Fryer, M. (1996). *Creative teaching and learning*. London: Paul Chapman.

Fryer, M., & Collings, J. A. (1991). Teachers' views about creativity. *British Journal of Educational Psychology, 61*, 207-219.

Gainer, B. (1997). Marketing arts education: Parental attitudes toward arts education for children. *Journal of Arts Management, Law & Society, 26*(4), 253-268.

Gardner, H. (1993). *Frames of mind: The theory of multiple intelligences* (10th anniversary edition). New York: Basic Books.

Gardner, H. (2000). *Intelligence reframed: Multiple intelligences for the 21st century*. New York: Basic Books.

Gelescke, K. (2001, April 28). What is creativity and can it be exhibited? *The Lancet, 357*, 1373-1374.

Goleman, D., & Kaufman, P. (1992). The art of creativity. *Psychology Today, 25*(2), 40-47.

Gruber, H. E., & Davis, S. N. (1988). Inching our way up Mount Olympus: The evolving-systems approach to creative thinking. In R. J. Sternberg (Ed.), *The nature of creativity* (pp. 243-270). New York: Cambridge University Press.

Gruber, H. E., & Wallace, D. B. (1999). The case study method and evolving systems approach for understanding creative people at work. In R. J. Sternberg (Ed.), *The handbook of creativity* (pp. 93-115). New York: Cambridge University Press.

Han, K., & Marvin, C. (2002). Multiple creativities? Investigating domain-specificity of creativity in young children. *Gifted Child Quarterly, 46*, 98-109.

Henderson, M., Presbury, J., & Torrance, E. P. (1983). *Manifesto for children*. Staunton, VA: Full Circle Counseling.

Horibe, F. (2001). *Creating the innovation culture: Leveraging visionaries, dissenters and other useful troublemakers in your organization*. New York: John Wiley & Sons.

Hyson, M., Hirsh-Pasek, K., & Rescorla, L. (1990). The classroom practices inventory: An observation instrument based on NAEYC's guidelines for developmentally appropriate practices for 4- and 5-year-old children. *Early Childhood Research Quarterly, 5*, 475-494.

Isenberg, J. P., & Jalongo, M. R. (2001). *Creative expression and play in early childhood* (3rd ed.). Upper Saddle River,

NJ: Merrill/Prentice Hall.

Isenberg, J. P., & Quisenberry, N. (2002). Play: Essential for all children. *Childhood Education, 79*, 33-39.

Jalongo, M. R. (1999). How we respond to the artistry of children: Ten barriers to overcome. *Early Childhood Education Journal, 26*(4), 205-208.

Joussement, M., & Koestner, R. (1999). Effect of expected rewards on children's creativity. *Creativity Research Journal, 12*(4), 231-239.

Kashdan, T. B., & Fincham, F. D. (2002). Facilitating creativity by regulating curiosity. *American Psychologist, 57*(5), 373-374.

Kemple, K. M., & Nissenberg, S. A. (2000). Nurturing creativity in early childhood education: Families are part of it. *Early Childhood Education Journal, 28*(1), 67-71.

Kincade, T. (2002). The child's heart in art. *American Artist, 66*(716), 12.

Kindler, A. M. (1996). Myths, habits, research, and policy: The four pillars of early childhood education. *Arts Education Policy Review, 97*(4), 24-30.

Li, R. (1996). *A theory of conceptual intelligence: Thinking, learning, creativity, and giftedness*. Westport, CT: Praeger.

Lindstrom, L. (1997). Integration, creativity, or communication? Paradigm shifts and continuity in Swedish art education. *Arts Education Policy Review, 99*(1), 17-24.

Lubart, T. I. (1990). Creativity and cross-cultural variation. *International Journal of Creativity, 25*, 39-59.

Lubart, T. I. (1999). Creativity across cultures. In R. J. Sternberg (Ed.), *Handbook of creativity* (pp. 339-350). New York: Cambridge University Press.

Martindale, C. (2001). Oscillations and analogies: Thomas Young, MD, FRS, genius. *American Psychologist, 56*, 342-345.

Marzano, R. J., Pickering, D., & McTighe, J. (1993). *Assessing student outcomes: Using the Dimensions of Learning Model*. Alexandria, VA: Association for Supervision and Curriculum Development.

Meador, K. (1999). Creativity around the globe. *Childhood Education, 75*, 324-325. (Special Theme Issue, Creativity Around the Globe.)

McLaughlin, N. (2001). Optimal marginality: Innovation and orthodoxy in Fromm's revision of psychoanalysis. *Sociological Quarterly, 42*(2), 271-287.

Mori, K. (1996). Expressive education in early childhood. *Arts Education Policy Review, 97*(4), 31-34.

Naglieri, J. A. (2001). Understanding intelligence, giftedness and creativity using the PASS Theory. *Roeper Review, 23*(3), 151-156.

Nakamura, J., & Csikszentmihalyi, M. (2001). Catalytic creativity: The case of Linus Pauling. *American Psychologist, 56*, 337-341.

National Advisory Committee on Creative and Cultural Education. (1999). *All our futures: Creativity, culture, and education*. United Kingdom: DfEE.

Nettle, D. (2001). *Strong imagination: Madness, creativity, and human nature*. New York: Oxford University Press.

Nicholson, M. W., & Moran, J. D. (1986). Teachers' judgments of preschoolers' creativity. *Perceptual and Motor Skills, 63*, 1211-1216.

Perry, P. (1998). Art in a million schools: Art education in China. *Journal of Art and Design Education, 17*(3), 311-314.

Pohjakallio, P. (1998). New and old: Multimedia as a tool for providing interpretation and meaning: Reflections on the Finnish Art Education History Project. *Journal of Art and Design Education, 17*(3), 303-310.

Priest, T. (2001). Using creativity assessment to nurture and predict compositional creativity. *Journal of Research in Music Education, 49*(3), 245-257.

Rea, D. (2001). Maximizing the motivated mind for emergent giftedness. *The Roeper Review, 23*(3), 157-164.

Ripple, R. E. (1989). Ordinary creativity. *Contemporary Educational Psychology, 14*, 189-202.

Robinson, A., & Clinkenbeard, P. R. (1998). Giftedness: An exceptionality examined. *Annual Review of Psychology, 48*, 117-139.

Robinson, K. (2001). Mind the gap: The creative conundrum. *Critical Quarterly, 43*(1), 41-45.

Roeper, B., & Davis, D. (2000). Howard Gardner: Knowledge, learning and development in drama and arts education. *Research in Drama Education, 5*(2), 217-233,

Rotigel, J. (2003). Understanding the young gifted child: Guidelines for parents, families, and educators. *Early Childhood Education Journal, 30*(4), 209-214.

Runco, M. A. (1996). *Eminent creativity: Everyday creativity and health*. Norwood, NJ: Ablex.

Runco, M. A., & Johnson, D. J. (1993). Parents' and teachers' implicit theories on children's creativity. *Child Study Journal, 23*(2), 91-113.

Runco, M. A., & Pritzker, S. (1999). *Encyclopedia of creativity*. San Diego, CA: Academic Press.

Rushton, S., & Larkin, E. (2001). Shaping the learning environment: Connecting developmentally appropriate practices to brain research. *Early Childhood Education Journal, 29*(1), 25-34.

Russ, S. W., Robins, A. L., & Christiano, B. A. (1999). Pretend play: Longitudinal prediction of creativity and affect in fantasy in children. *Creativity Research Journal, 12*(2), 129-139.

Ryan, R. L., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*, 68-78.

Sefton-Green, J., & Sinker, R. (Eds.). (2000). *Evaluating creativity: Making and learning by young people*. London: Routledge.

Semali, L. M., & Watts Pailliotet, A. (Eds.). (1999). *Intermediality: The teachers' handbook of critical media literacy*. Boulder, CO: Westview.

Simpson, J. W. (1995). Choices for urban art education. *Arts Education Policy Review, 96*(6), 27-30.

Stanko, A. J. (2000). *Creativity in the classroom: Schools of curious delight* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum.

Sternberg, R. (1998). Principles of teaching for successful intelligence. *Educational Psychologist, 33*(2/3), 65-72.

Sternberg, R., & Lubart, T. (1996). Investing in creativity. *American Psychologist, 51*(7), 677-686.

Torff, B. (2000). Encouraging the creative voice of the child. *NAMTA Journal, 25*(1), 195-214.

Torrance, E. P. (1993). The beyonders in a thirty-year study of creative achievement. *Roeper Review, 15*, 131-134.

Webster, P. R. (1990). Creativity as creative thinking. *Music Educators Journal, 76*(9), 22-28.

Weininger, O. (1988). "What if" and "as if": Imagination and pretend play in early childhood. In K. Egan & D. Nadaner (Eds.), *Imagination and education* (pp. 141-149). New York: Teachers College Press.

Weisberg, R. W. (1992). *Creativity: Beyond the myth of genius*. New York: Freeman.

Zimmerman, E., & Zimmerman, L. (2000). Art education and early childhood education: The young child as creator and meaning maker within a community context. *Young Children, 55*(6), 87-92.

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